



The

GARzette

The Official Newsletter of the Gwinnett Amateur Radio Society
September 2020 <http://www.gars.org/> Volume 29, Issue 9

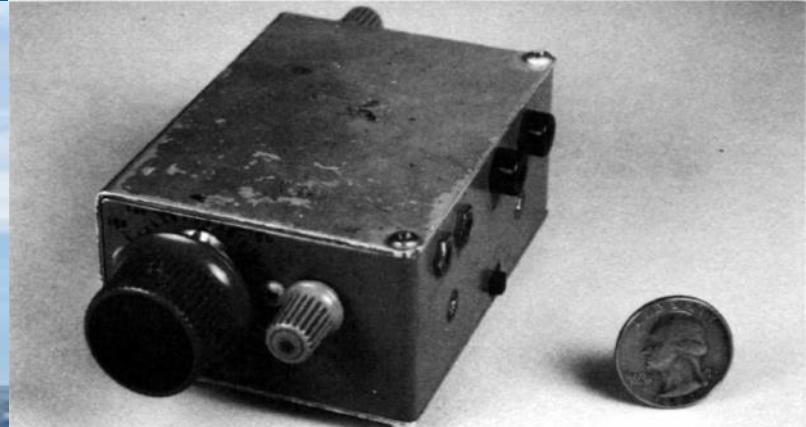


September GARS Meeting: Having Fun With QRP by Steve Hudson, AA4BW

Equipment - Antennas - Operating - Strategy

Minimum QRP

Doing more with under five watt amateur radio



I 
QRP



Online GARS meeting Tuesday, September 15, 2020 at 7:00 pm

GARS September Meeting and Workshop

Having Fun With QRP

RepeaterBook

by Steve Hudson, AA4BW

Tuesday, September 8, 2020 7:00 pm

by Chuck Adams, KV4VT

Tuesday, September 15, 2020 7:00 pm

**GARS Meetings and Workshops
will be held online until further notice.
See <http://www.gars.org> for more information.**

INSIDE

GARS Happenings.....	Pg 3
Local VE Testing Sessions.....	Pg 6
Vacuum Tubes' Last Stand? .	Pg 7
In Other News	Pg 9
Net Manager's Corner	Pg 11
GARS Membership Page.....	Pg 12
Mtg / Workshop Minutes.....	Pg 14
Contests and Hamfests	Pg 15
GARS Event Schedule	Pg 16
VE Testing / Schedules	Pg 17

GARS Communications

<u>2 Meter Repeaters</u> 147.075(+) MHz Tone 82.5 147.255(+) MHz Tone 107.2	<u>6 Meter Repeater</u> 53.110 (-1 MHz) No Tone (Offline for Maintenance)
<u>1.25 Meter Repeater</u> 224.580(-) MHz Tone 100.0, 1.6 MHz Offset	<u>Other Resources:</u> <u>APRS</u> 144.390 -- 1200 Baud W4GR
<u>70 Cm Repeaters</u> 444.525(+) MHz Tone 82.5 442.100(+) MHz Tone 100 442.325(+) MHz Tone 100	<u>D-STAR</u> WD4STR 145.060 + (1.4 MHz) 440.550 + (5 MHz)

**Don't forget
to support our
advertisers at the
back of the
GARzette.**

Snail Mail Address:
GARS
P.O. Box 492531
Lawrenceville, GA 30049

Front cover credits:

<https://n6pse.wordpress.com/2013/11/30/to-qrp-or-not-to-qrp/>, <https://wb3gck.com/>,
<http://www.arrl.org/files/file/Technology/tis/info/pdf/93hb3037.pdf>

The *GARzette* is the official monthly newsletter of the Gwinnett Amateur Radio Society, serving its members and other persons interested in the advancement of the Amateur Radio art.

Original articles, art, and photos are invited and encouraged. Previously copyrighted submissions cannot be accepted for reprinting unless permission from the appropriate publisher is provided in writing along with the information being submitted. If reprints are from publications allowing their unrestricted use, please include a copy of the printed permission contained in the publication.

If possible, bring your articles to the monthly meeting in Microsoft Word or rich text (.rtf) or text or HTML format or by e-mail to editor@gars.org. Artwork can be accepted in most any graphics format and can be submitted via e-mail to the same address. Alternate means of submittal can be arranged when necessary.

In keeping with the Amateur Radio spirit, permission is hereby granted for the reproduction of The *GARzette* articles by other Amateur Radio club newsletters provided that proper credit is given to the individual author and *The GARzette*.

The GARzette is published each month with the assistance of Norm Schklar, WA4ZXV who prints copies for distribution at meetings, etc. and Dave Bruse, W4DTR, who distributes the news letter electronically.

Deadline for submissions is the 28th of each month for inclusion in the following month's issue.

For additional information view our Website at: <http://www.gars.org>

Newsletter Editor: editor@gars.org Bill Eggers—WB2RIS 470-238-9603



GARS Happenings

20 Years ago in the September 2000 GARzette:

- GARzette editor Rick Patchin, KD4RFK, introduces the “Ask an Elmer” article;
- Susan Swiderski, AF4FO, writes about “QSLing Made Easy”;
- Bill Carter, KG4FXG, writes an article titled “CW Mania”;
- Ike Chapman, K4WEC, writes the “ARES Report”.

You can always browse the GARzette archive at <http://www.gars.org/newsletters>



73, Bill, WB2RIS, GARzette Editor



THANK YOU

**To Our Doctors, Nurses, First Responders,
and Public Safety Officers On The Front Lines**

GARS HELP WANTED

- GARzette Editor — Looking for someone to become the next GARzette Editor, starting off as a GARzette Committee member / Assistant Editor. Experience with Microsoft Publisher would be nice, but any experience with Microsoft Office products is helpful. You will be trained in the use of Microsoft Publisher. Most of the content is supplied by others, but occasionally you may wish to write content, especially in your area of expertise. If you are interested, please contact Bill Eggers, WB2RIS at editor@gars.org.

If you're interested in volunteering for one of these positions, please contact one of the GARS Officers. Supporting GARS activities is an important part of what we do and help from club members is needed.

[PS— Articles to publish in the GARzette, either written by GARS members or published elsewhere, are always welcome. —Ed.]

GARS Happenings (Cont'd)

GARS Scholarship

Dear Mr. Schklar,

Hello, my name is Ryan Bibby, KN4RQL, and I am the recipient of the Gwinnett Amateur Radio Society Scholarship. I really want to express my heartfelt appreciation for this scholarship. I'm honored to receive such a gift.

I'd like to share a little about myself if that's ok. This fall I will be attending Kennesaw State University for my degree in computer science. I have already joined the KSU amateur radio club and have gotten to know a couple of their members. Recently I have gotten into AMSAT and APRS. I was about to test for my general before COVID cancelled everything. At KSU they offer tests and I am going to get my general as soon as I can, I've been studying very hard. At Whitewater high school, that I just graduated from, I started a new radio club, WOWHS. I also just applied to work at the Atlanta HRO and hope to gain even more knowledge by working with people who have more experience than me. If I do get the job I would love if you came by.

I've noticed that my dorm is only about 30 minutes away from you, I would love to be able to meet up and talk sometime and personally thank you!

Thank you so much,

Ryan Bibby, KN4RQL

ryan@bibby.dev

937.776.6186



GARS Happenings (Cont'd)

COVID-19 Madness Sprint Results

Results / winners of the first 5 weeks of the GARS COVID-19 Madness Sprint.

The rules of the Sprint are posted at <http://www.gars.org/gars/covid19sprint/>

In a nutshell, the rules are to contact as many 1x1 calls and W1AW on as many bands and modes as possible for each weekly Sprint.



Most 1x1 Special Event Stations are on the weekend but some are scheduled during the week. Since there are only a few 1x1 stations per week this should not be an all-day, all-weekend event.

- Jul 20 – Jul 26; No entries received
- Jul 27 – Aug 2; Randy Collins N4COR contacted W1V on 40m Digital **W1V, Wireless Society of Southern Maine**
- Aug 3 – Aug 9; Ralph Pickwick KJ4CNC contacted K3K on 20m Phone **K3K, KDKA Radio Pittsburgh 100th Anniversary**
- Aug 10 – Aug 16; Ralph Pickwick KJ4CNC contacted N7C on 17 and 20m Phone **N7C, Navajo Code Talkers**
- Aug 17 – Aug 23; We have a tie:
Ralph Pickwick KJ4CNC contacted K8T on 40m Phone **N8T, Ohio QSO Party**
Randy Collins N4COR contacted K6L, on 20m FT8 **K6L, Lighthouses on the Air**

Ralph's secret seems to be the time of day. His four 1x1 contacts were at: 18:05, 18:11, 18:15, and 18:27. Seems to be a pattern.

The GARS COVID-19 Madness Sprint has been extended to the end of September, here are the dates:

- Aug 24 - Aug 30
- Aug 31 - Sep 6
- Sep 7 - Sep 13
- Sep 14 - Sep 20 (September 19 is International Talk Like a Pirate Day – Bonus Points)
- Sep 21 - Sep 27

If W1AW, ARRL HQ, is on the air, work them on as many bands and modes as possible. ARRL Headquarters, W1AW, is the only non-1x1 call allowed for this Sprint. September 19th (International Talk Like a Pirate Day) any QSO you do talking/texting like a pirate, your points for those QSOs double. (I guess to talk like a pirate on CW or Digital modes you send a bunch of RRRRRs).

To get a listing/schedule of 1x1 calls and when they might be on the air visit this site and do a search.
<http://www.1x1callsigns.org/index.php/search>

[The annual Route 66 On The Air special event activates 21 1x1 calls, W6A through W6U, from September 12 - 20. - Ed.]

73, Dallas KD4HNX

Local VE Testing Sessions

North Fulton Amateur Radio League (NFARL)

The VE Team will be holding its first exam session since February this Saturday, September 12th. [The next session is scheduled for October 10th. Check <http://www.nfarl.org/testSessions.html> for more information. - Ed.] All license class exams will be available. The exam session will be held at Slopes BBQ, 34 Crossville Road, Roswell, GA, 30075. Hours are 9:00 - 11:00 AM.

The exam fee is \$15 cash. Other Details:

Seating limited to 8 candidates.
No walk-ins accepted.

Pre-registration via email to nv4c.ian@gmail.com required. Phone reservations not accepted.

Please do NOT register if you are not sure you will make it. Seating is limited and we want to be sure everyone who wants to test can do so.

Registration will close at 11:59 PM on Thursday, July 9. That gives Ian time to know what to expect Saturday, and accommodate replacements for cancellations.

Masks required. No mask, no admittance.
Enter the building via the side entrance.

Please pre-register with the FCC for an FCC Registration Number at <https://apps.fcc.gov/cores/userLogin.do>

Please pre-fill and bring the NCVEC Quick Form 605, found at http://www.arrl.org/files/file/VEs/605%20Form_2020_Fully%20Interactive.pdf

Please also bring the following:

- Government-issued photo ID
- Pen and pencil
- If upgrading, copy of current license
- Calculator (as stand-alone device) if you want to use one

Source: <http://www.nfarl.org/testSessions.html>

Tri County Amateur Radio Club

Tri County Amateur Radio Club held their first testing session since lockdown, September 1 @ 2pm! It was located at Hoschton Park outdoor pavilion. At this session, VE's in attendance were Roger WB4T, Max KN4OTT, Mike W9QO, and Nat K4VQ. Successful testing session as 2 candidates upgraded to General: John Ring III KO4GOU and Bill Kincheloe KM4DRT.

Congrats to both hams! Go and enjoy those general privileges!

73, Nat K4VQ

Source: <http://tricountyarc.com/>

Cherokee Amateur Radio Society

We may only be able to accommodate a few simultaneous tests so we can maintain the safety of everyone. We recommend highly that you register if you want to be accommodated.

Register with John Reynolds (VEC) W4TXA
Phone: (770) 715-9640
Email: wx4txa.john@gmail.com

Where: Cherokee County Charter Academy. 2126 Sixes Road, Canton GA, 30114 (We will be outside, under cover sidewalk, West/Left side of Building)

Time : 1:00PM (1300 - 1430) on September 12, 2020
Testing will be outdoors, but requires the wearing of a mask to keep everyone safe.

For more information, please visit their website at <http://tricountyarc.com/>

(Continued on page 14)

Vacuum Tubes' Last Stand?

By Brian R. Page, N4TRB
n4trb@arrl.net

What is this thing that one amateur described as the “cat’s meow” when it first came out? It’s called the Nuvistor, a tiny, really tiny, vacuum tube announced by RCA in 1959, and popularly believed to be the vacuum tubes’ answer to the relatively new & rapidly evolving transistor. Even the name Nuvistor seems to be a take-off on the word transistor.



Figure 1—The Nuvistor

The Nuvistor is about the same size as a 1960s era transistor and is radically different from other vacuum tubes. Indeed, from appearance, it is hard to believe this little device actually is a tube. RCA was a major player in the early days of transistors, perhaps the major player. So why would they invest substantial R&D in a fading technology, surely aware that it would have only a short run before being obsoleted by semiconductors? It turns out there were some specific applications that justified the effort. But before looking at specifics, what exactly were Nuvistors?

An ordinary glass envelope vacuum tube is much like a tungsten light bulb: a high-wattage heating element heats a cathode, causing it to emit electrons which stream across the vacuum space inside the tube, seeking the positively charged plate. A simple tube such as this functions as a rectifier, a diode, allowing current to pass in only one direction. More advanced tubes have grid screens interposed between the

cathode and the plate. Relatively small electrical charges on the grid screens control the large current of streaming electrons, thus providing amplification.



Figure 2—Size comparison of ordinary tubes to a Nuvistor (second from right)

That’s a barebones description of how tubes work but it is still the essence of the hundreds of different types of vacuum tubes that are all tweaked for different performance characteristics and applications. Most ordinary vacuum tubes are enclosed in glass which has the air removed in the final manufacturing step.

Nuvistors are vastly smaller than ordinary glass vacuum tubes and the small size is only the most obvious difference. RCA had great expectations for their little “hatched” device, as described in a 1959 advertisement (see <https://books.google.com/books?id=IkniAAAAMAAJ&pg=PA25>):

“RCA Electronics introduces the tube of tomorrow

“Called the Nuvistor, this thimble-sized tube is likely to start a revolution in electronics. RCA engineers scrapped old ideas - took a fresh look at tube design. The result will be tubes that are far smaller, perform more efficiently, use less power, can take more punishment, are more reliable. Developmental models now being tried out by designers will have a profound effect on the size, appearance, and performance of electronic equipment for entertainment, communications, defense, and industry in the future. It is another example of the way RCA is constantly advancing in electronics.”

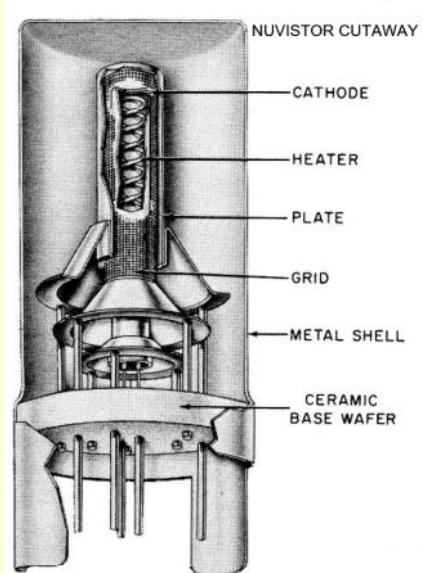


Figure 3—Nuvistor cutaway diagram

Whereas traditional vacuum tubes are constructed with various metals, mica insulating components, glass stems, and often a Bakelite base, Nuvistors are composed of only two materials: metal and ceramic. On the inside, the Nuvistor uses a heating element running up the center, surrounded by cylindrical electrodes. Because of the small size, the Dark Heater, as RCA called the central element, ran hundreds of degrees cooler than conventional heaters. And the small size, with the cathode and plate so close together, made Nuvistors excellent for VHF and UHF (up to 1.2 GHz) applications. Indeed, one of the first and most popular applications for Nuvistors was in television tuners such as the RCA New Vista color TV (see full page ad at <http://n4trb.com/Figure4.jpg>). But it’s hard to believe that RCA revolutionized vacuum tube technology just to create first generation color television tuners. Nuvistor technical specs went far beyond that required for TV.

The manufacturing process was unique and greatly advanced for the time. Instead of spot-welding internal components, Nuvistor elements were brazed “at very high temperatures in a hydrogen atmosphere...” and then out-gassed in a 10-minute process at 1,562-degrees F, followed by vacuum sealing

(Continued on page 8)

Vacuum Tubes' Last Stand? (cont'd)

at 1,742 degrees F. These processes were automated. One result of this process is that Nuvistors were able to operate in extremely high-temperature environments. In this photo, Nuvistors are lowered into the exhaust and sealing machine.



Figure 4—Nuvistor sealing machine

Additionally, Nuvistors were designed to be mechanically rugged, and I do mean rugged. Production devices were tested for shocks at a maximum acceleration of 1,000 G. And not just once, but 20 times. The test-to-destruction reached levels of 3,000 G before device failure. Then came vibration testing in all three X, Y, and Z axes with a constant acceleration of 20 G and a vibration frequency up to 500 Hz. Are you beginning to get the idea that RCA had more in mind than color television? If not, consider this.

Nuvistors were certified to work in nuclear radiation environments, both pulse (as in an atomic blast) and steady state (as in a reactor). After the radiation pulse, Nuvistors would return to normal functioning in 0.5 milliseconds. Such shock and radiation exposure would destroy competing transistor technologies of the time. Ordinary vacuum tubes were also unlikely to withstand such punishment. Is it a coincidence that Nuvistors came along as the Cold War was underway in earnest with the military needing

avionics for ballistic missiles and intercontinental nuclear bombers? Oh, and spacecraft?

Nuvistors found their way into a number of pioneering spacecraft. For example, the U.S. got its first close look at the moon with the series of Ranger probes beginning in 1964. The Ranger spacecraft were designed to photograph the lunar surface, like this picture from Ranger VIII, its last image taken 2 seconds before impact.

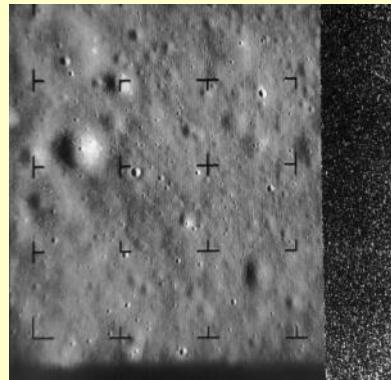


Figure 5—Ranger VIII Moon photo

The RCA video subsystem used Nuvistors. Tiros, the first weather satellite, used Nuvistors. On a larger scale, the Saturn V rocket that launched Apollo to the moon used Nuvistors. Apollo may be renowned for the first large-scale use of integrated circuits in the Apollo Guidance Computer, but in the launch vehicle where high vibration, temperature extremes, and potential radiation exposure were possible, Nuvistors filled the bill.



Figure 6—AS-501 Saturn V Mission

Aside from space exploration, the good bandwidth, low noise, and high gain characteristics of Nuvistors made them popular into the 1970s in high-end audio equipment such as studio recorders, microphones, and other test equipment where small size, high-performance, and the low-power specs were desired.

Amateurs also found use for Nuvistors, mainly in VHF/UHF converters. QST published a flurry of articles using Nuvistors in the early 1960s. *RCA Ham Tips*, of course, published several Nuvistor projects, like this fancy 2-meter transceiver in the Spring 1965 issue.

The front cover of the Spring 1965 issue of "RCA Ham Tips". The title "HAM TIPS" is prominently displayed in large, bold letters at the top. Below the title is the subtitle "A PUBLICATION OF RCA ELECTRONIC COMPONENTS AND DEVICES". At the bottom right is a small illustration of a vacuum tube. The main article is titled "Transistors and Nuvistors In a Two-Meter Transceiver" by R. M. Mendelson, W2OKO. A short abstract and author bio follow. The page is framed by a thin border.

Figure 7—Front Cover, Spring 1965 *RCA Ham Tips*

Commercial gear by Hallicrafters and Heathkit employed the little tubes too. My own Nuvistor came to me mixed in with a bag of vintage transistors that I bought at a hamfest for a few bucks; but if you have a desire to build some retro gear, Nuvistors are still readily available on eBay with reasonable prices, although you might have more trouble finding Nuvistor sockets!

So, were Nuvistors the last dying gasp of vacuum tubes desperately trying to maintain a sliver of market share in the face of the transistor tsunami? You decide.

In Other News

COVID-19 Madness Sprint Results

Results / winners of the first 5 weeks of the GARS COVID-19 Madness Sprint.

The rules of the Sprint are posted at <http://www.gars.org/gars/covid19sprint/>

In a nutshell, the rules are to contact as many 1x1 calls and W1AW on as many bands and modes as possible for each weekly Sprint.



Most 1x1 Special Event Stations are on the weekend but some are scheduled during the week. Since there are only a few 1x1 stations per week this should not be an all-day, all-weekend event.

- Jul 20 – Jul 26; No entries received
- Jul 27 – Aug 2; Randy Collins N4COR contacted W1V on 40m Digital **W1V, Wireless Society of Southern Maine**
- Aug 3 – Aug 9; Ralph Pickwick KJ4CNC contacted K3K on 20m Phone **K3K, KDKA Radio Pittsburgh 100th Anniversary**
- Aug 10 – Aug 16; Ralph Pickwick KJ4CNC contacted N7C on 17 and 20m Phone **N7C, Navajo Code Talkers**
- Aug 17 – Aug 23; We have a tie:
Ralph Pickwick KJ4CNC contacted K8T on 40m Phone **N8T, Ohio QSO Party**
Randy Collins N4COR contacted K6L, on 20m FT8 **K6L, Lighthouses on the Air**

Ralph's secret seems to be the time of day. His four 1x1 contacts were at: 18:05, 18:11, 18:15, and 18:27. Seems to be a pattern.

The GARS COVID-19 Madness Sprint has been extended to the end of September, here are the dates:

- Aug 24 - Aug 30
- Aug 31 - Sep 6
- Sep 7 - Sep 13
- Sep 14 - Sep 20 (September 19 is International Talk Like a Pirate Day – Bonus Points)
- Sep 21 - Sep 27

If W1AW, ARRL HQ, is on the air, work them on as many bands and modes as possible. ARRL Headquarters, W1AW, is the only non-1x1 call allowed for this Sprint. September 19th (International Talk Like a Pirate Day) any QSO you do talking/texting like a pirate, your points for those QSOs double. (I guess to talk like a pirate on CW or Digital modes you send a bunch of RRRRRs).

To get a listing/schedule of 1x1 calls and when they might be on the air visit this site and do a search.
<http://www.1x1callsigns.org/index.php/search>

[The annual Route 66 On The Air special event activates 21 1x1 calls, W6A through W6U, from September 12 - 20. - Ed.]

73, Dallas KD4HNX

In Other News

New Contest for Portable Stations to Debut in October

A new amateur radio contest for portable operators — the Fox Mike Hotel Portable Operations Challenge (**POC**) — will debut October 3 – 4. The event is aimed at leveling the competitive playing field between fixed stations and portable stations. **Scoring** for the POC, based upon a kilometers-per-watt metric, will be handicapped in favor of the portables. The contest is the brainchild of Frank Howell, K4FMH. Sponsors include *National Contest Journal* (**NCJ**) — an ARRL publication — but the POC will not be an official *NCJ* or ARRL contest.

“*NCJ*’s role is to encourage hams who don’t contest to give it a try,” *NCJ* Editor Dr. Scott Wright, K0MD, said. “It will encourage activity by operators who are limited by real estate and do not have a full-blown contest station. Events like this stimulate more interest in contesting, and this will have an international scope to give chances to snare some new DXCC entities.”



Other sponsors include the UK DX Foundation (**CDXC**), the Hellenic Amateur Radio Association of Australia (**HARAOA**), and the South African Radio League (**SARL**).

“I think the [POC] steering committee, consisting of both veteran DX contest participants and some of the best portable operators in the world, has come up with something worth giving a go,” Howell said. “With this scoring metric, it’s more about radiosport than radio gear.”

According to the **contest rules**, scoring will be calculated using the distance between stations (Maidenhead grid squares) in kilometers divided by power output in watts. Fixed (QTH) stations will compete against portable (P) stations on 80, 40, 20, 15, and 10 meters. Allowable modes include phone, CW, and digital. For the 2020 event, the number of transmitters concurrently in use will be restricted to two.

Portable stations may not make use of permanently installed amateur radio equipment or facilities but may use ac mains power. The exchange is call sign, station class (P or Q), consecutive serial number, and four-character grid square. Contact **Howell** for more information.

Source: <http://www.arrl.org/news/new-contest-for-portable-stations-to-debut-in-october>

Scouting’s Jamboree on the Air Set for October 16, 17, and 18

Jamboree on the Air (**JOTA**) and Jamboree on the Internet (**JOTI**) will be held this year on October 16, 17, and 18. **Register** online as an individual or as a group.

Jamboree on the Air is the largest Scouting event in the world. In a typical year, more than 1 million Scouts participate in JOTA, with over 11,000 stations operated by 20,000+ young radio amateurs from 150+ countries around the world.

JOTA details are available on the K2BSA website. The website menu will direct users to additional supporting information. K2BSA’s Jim Wilson, K5ND, says many locations are already offering virtual radio merit badge classes “and no doubt will be using similar approaches for Jamboree on the Air.”



Source: <http://www.arrl.org/news/scouting-s-jamboree-on-the-air-set-for-october-16-17-and-18>

Net Managers Corner

Monday Night 2 Meter “Want, Swap, Sell, and Information Net”

GARS NEEDS MEMBERS TO SERVE AS NET CONTROL STATIONS!

GARS is a great Amateur Radio service club and we have the membership and awards to prove it. Our club is a very busy and active club and we use the Monday night net to get the information out to our members. Weekly participation is needed to make our net function well. There is only a small group of very dedicated people that make the net happen each week, and we need more members to volunteer to serve as Net Control Stations (NCS) on a rotating basis.

Out of almost 300 members, there are only SEVEN primary people who serve as NCS for the GARS net every Monday night. In no particular order, they are:

Don - KW4AL	Ray - N4GYN	Bill - KK4AUA
David - KA4KKF	Kevin - KK4WOG	Chuck - KK4TKJ
Russell - AB4QQ		

As GARS Net Manager (Chuck KK4TKJ), I really need 26 people to fill NCS positions. I do plan and post the schedule months in advance. Any conditions will be accommodated that you as a rotating NCS need to place on the scheduling of your duties. If your plans change, I can make adjustments for the schedule to work, and I will make those changes happen as soon as I am notified of a problem. As Net Manager, I also send out reminders each week to let the NCS scheduled know he or she is NCS for the next Monday night net. In short, serving as a rotating NCS is a small duty but a great contribution to the club.

The “Want, Swap, Sell Information Net” begins promptly at 19:30 every Monday night and runs about 45 minutes. As a scheduled NCS, you will request the assistance of a volunteer alternate NCS each time you have Net Control. Your simple duties will be to tune in to the GARS repeater, read the script, take a few notes and forward the information to me for record keeping.

Please lend a hand and contact me at KK4TKJ@arrl.net. Sign up to help support the effort that makes GARS the great club that it is.

73 and see you on the Nets!

Chuck McCord, KK4TKJ

GARS Net Manager

GARS Membership Page

New GARS Members in August

Ryan Bibby (KN4RQL)
Joseph Keyes (K3YES)

New Members: 2

Total Members as of August 31, 2020
340

Join GARS members for our
weekly breakfast gathering at
7:30 AM most Saturdays

Now at

Cracker Barrel Restaurant
75 Celebration Dr.
Suwanee, GA 30024

[\(Directions\)](#)

The following members are
celebrating birthdays
in September:

**HAPPY BIRTHDAY!!
From All of Us at GARS**

Karen Albritton (KI4HPP)
Mary Bachner (KE4MFZ)
Sherryl Bailey (N3MIU)
Jackson Britt (KM4PTV)
Richard Canova (KN4CGJ)
Ben Cullinan (KN4ZEX)
Bill Cullinan (KB4KBC)
Pierre Decatrel (WB1EZK)
Russell Dickerson (KN4HAE)
James Drumm (N2FOF)
Jim Farmer (K4BSE)
Roger Gibson (WB4T)
Neal Gilchrist (W4HNG)
Fred Hoefler (W3TLC)
Karen Kaplan
Richard Kitz (KM4SWL)
Alex Kowalchuk (W4KYW)
Roinell Lewis (K4RNL)
Maria Lewis
Cal Ludwick (KM4VDA)
Charles McElhannon (KM4QVI)
Paul Pannell (K4XRA)
Manny Romero (KD4LXR)
Ivette Santiago (KN4OYE)
Donald Stewart (KW4AL)
John Stockinger (KC4RFK)
Richard Waigand (K4KME)
Joseph Wilson (KN4KBH)
Carter Wood (AG4LK)
Carl Wulfestieg (WZ4CW)

GARS MEMBERSHIP

Your current GARS membership status is shown in the monthly newsletter e-mail
towards the bottom of the message.

To become a GARS member, or to renew your GARS membership, please visit our website—<http://www.gars.org>

To make changes to your GARS membership (moved, new e-mail address, new phone number, etc.),
please e-mail the Membership Committee - membership@gars.org

You can **renew or update** your Amateur Radio license information with the FCC at their website for free
<http://wireless.fcc.gov/uls/index.htm?job=home>

To update your ARRL information, please visit their website - <http://www.arrl.org>

Membership Chair: Karen Albritton, KI4HPP
Committee Members: Dave Bruse, W4DTR, Pam Meridy, WB1AKQ,
Ivette Santiago, KN4OYE , Cathy Kelley, KN4DML

EXTRA! EXTRA!

Repeater Status

6M	Currently down
147.075	Operational in Snellville
147.255	Operational in Snellville
224.580	Operational in Grayson
442.100	Operational at Goshen Springs
442.325	Operational in Buford
444.525	Operational in Snellville

Link remote receivers being added

Donating to GARS

Your GARS donation can be used for a certain purpose by donating to one of these funds:

- GARS SK Memorial Fund for Education (to remember and honor Silent Keys);
- GARS Scholarship Fund (Administered by the ARRL for awarding scholarships);
- GARS General Fund (any club purpose).

GARS has joined these rewards programs (a portion of every purchase you make through these merchants may be donated to GARS):

- Amazon Smiles;
- Kroger Community Rewards program.

For more information on how to sign up for these rewards programs, or to donate to GARS, visit <http://gars.org/gars/donations-to-the-club>

GARS on Social Media



Discord link request:
<http://gars.org/gars/discord>



Groups.io:
<http://gars.org/groups.io>



Visit GARS on Facebook:
<http://gars.org/facebook>



Follow GARS on Twitter:
<http://gars.org/twitter>



Join GARS on YouTube:
<http://gars.org/youtube>

G A R S Volunteers

OFFICERS

John Davis, President	WB4QDX	
Sandy Jackson, Vice President	KJ4DRO	
Joe Biddle, Secretary	AD4PZ	
Pam Meridy, Treasurer	WB1AKQ	
Randy Collins, Program Manager	N4COR	

MANAGERS/COMMITTEE CHAIRS

Karen Albritton, Membership Chair	KI4HPP	
Dave Bruse, VE Team Leader	W4DTR	
David Adcock, Webmaster and Field Day Chair	KA4KKF	
Ralph Pickwick, Apparel Manager and Education Chair	KJ4CNC	
Glen Wendt, TechFest Chair	W3WWT	
Bill Eggers, GARzette Editor	WB2RIS	
Eddie Foust, Repeater Chair	WD4JEM	
Mike Weathers, WAS / DXCC QSL Card Checker and Historian	ND4V	
Chuck McCord, Net Manager	KK4TKJ	
Technical / RFI Advisor	Open	
Joe Biddle, Winter Field Day Chair	AD4PZ	
Kyle Albritton, Multimedia Chair	W4KDA	
Don Stewart, Elmer Manager	KW4AL	

Dave Slotter, Georgia QSO Party Chair, Workshop Leader and Public Information Officer	W3DJS	
---	-------	--

DIRECTORS AND TRUSTEES

Kyle Albritton, W4KDA		Rick Cobb, N4XYY	
Mike Weathers, ND4V		Bill Cherepy, WB4WTN W4GR Trustee	

GARS MEETING AND WORKSHOP MINUTES

Gwinnett Amateur Radio Society GENERAL Meeting Minutes 8/11/2020

President John Davis (WB4QDX) and Opened the meeting at 7:00pm and Closed the meeting at 8:30pm (Covid-19 Alternative Online)

Online participants: ~38

Treasurer Report: Pam Meridy (WB1AKQ) – read the financial report.

Membership Report: John reported the Membership is at [334].

Programs – Randy (N4COR) the programs lineup.

- **August** – Getting started with HamPi
- **September** – QRP
- **October** – Homebrew show and tell

Workshop – Dave (W3DJS) reported the Workshop would be going online.

- August – Parks on the Air
- September - Repeaterbook.com

Memorials – A moment of silence was observed to remember **Mike Swiderski (K4HBI)**

GARS Covid19 Madness Sprint – Dallas (KD4HNX) discussed the challenges/rewards seeking the 1x1 calls.

Program – Dave Slotter (W3DJS) getting started with

HamPi.

Submitted by: Joe Biddle (AD4PZ) GARS Secretary

[Note: Minutes are published as they are recorded.
Event information may be incorrect.—Ed.]

Gwinnett Amateur Radio Society Workshop Minutes 8/18/2020

Number in Attendance (online): 27

Workshop Topic: Parks on the Air (POTA)

Presenter: Bill Cherepy, WB4WTN

Brief Summary: POTA is a radiosport program that encourages communications to state, provincial, nationally, and internationally managed public lands. Bill discussed the short set of rules and how to join POTA as an activator or chaser.

Bill's presentation is posted at: <http://www.gars.org/gars/previous-workshops/>

Submitted by: Dallas KD4HNX

(Continued from page 6)

Stephens County Amateur Radio Society

VE session (September 19, 2020) from 1 till 4 pm in Lavonia GA at 1240 E. Main St, at the white gazebo. [Lavonia, GA is off I-85 near the Georgia / North Carolina border... - Ed.]

If you need to test please get a hold of us at (kr4cw1@gmail.com). We are working on a 2nd test session , if you would like to be apart of it please send us a contact email to club email and will be glad to help you on the prelist of this....

We will be giving All Tests (Tech, General, Extra) Cost will be \$15.00 must have ID and copy of License, if you're upgrading... if it's your first time taking a test please go to the FCC website and sign up for a FRN number and create your Account. Here is the link to get started: <https://apps.fcc.gov/coresWeb/regEntityType.do>

Please make sure you print this off and bring with you, so you will have your FRN number. Without this we can not submit your test.

Source: <http://www.sc-ars.org/>

ARRL CONTESTING INFO	HAMFEST CALENDAR
<p>From ARRL Contest Calendar > For more information click the links <</p> <p>September 2020 12-13 EME - 2.3 GHz & Up 12-14 September VHF 19-20 10 GHz & Up - Round 2</p> <p>October 2020 10-11 EME - 50 to 1296 MHz 19-23 School Club Roundup</p> <p>November 2020 7-9 Nov. Sweepstakes - CW 21-23 Nov. Sweepstakes - Phone 28-29 EME - 50 to 1296 MHz</p> <p>December 2020 4-6 160 Meter 12-13 10 Meter 20 Rookie Roundup - CW</p> <p>January 2021 1 Straight Key Night 2 Kid's Day 2-3 RTTY Roundup 16-18 January VHF Sweepstakes</p> <p>February 2021 8-12 School Club Roundup 20-21 International DX - CW</p> <p>March 2021 6-7 International DX - Phone</p> <p>April 2021 11 Rookie Roundup - Phone</p> <p>(no ARRL contests in May)</p> <p>June 2021 12-14 June VHF 19 Kid's Day 26-27 Field Day</p> <p>July 2021 10-11 IARU HF World Championship</p> <p>August 2021 7-8 222 MHz and Up Distance Contest 14-15 10 GHz & Up - Round 1 15 Rookie Roundup - RTTY</p> <p>For more information: http://www.arrl.org/contest-calendar</p>	<p>09/12/2020 - Dalton Swapfest (Check website for status) Location: Dalton, GA Type: ARRL Hamfest Sponsor: Dalton Amateur Radio Club Website: https://facebook.com/events/s/darc-swapfest/2638699726449402/?ti=icl</p> <p>09/12/2020 - The Annual Blue Ridge ARS Hamfest (Check website for status) Location: Spartanburg, SC Type: ARRL Hamfest Sponsor: Blue Ridge Amateur Radio Society Website: http://BRARS.CC</p> <p>09/19/2020 - Sevier County Amateur Radio Society (Check website for status) Location: Sevierville , TN Type: ARRL Hamfest Sponsor: Sevier County Amateur Radio Society & 470 Amateur Radio Group Website: http://seviercountyars.com</p> <p>09/25/2020 - 09/26/2020 W4DXCC by SEDCO (CANCELLED) Location: Pigeon Forge, TN Type: ARRL Convention Sponsor: SEDCO Website: http://w4dxcc.com</p> <p>11/07/2020 - 11/08/2020 Stone Mountain Hamfest, ARRL GA Section Convention (CANCELLED) Location: Lawrenceville, GA Type: ARRL Convention Sponsor: Alford Memorial Radio Club & Gwinnett Amateur Radio Society Website: http://www.stonemountainhamfest.com/</p> <p>For more information: http://www.arrl.org/hamfests-and-conventions-calendar When searching by division, remember some states adjacent to GA are in different divisions: Southeastern: GA, AL, FL Delta: TN Roanoke: NC, SC</p>

GARS Events Calendar for 2020

TechFest (www.techfest.info)	January 18
Winter Field Day	January 25&26
General HamCram	TBD
Dog Show Fundraiser	Canceled for 2020
Georgia QSO Party	April 11 (home ops)
North metro area Fox Hunt	April
Memorial Day Parade	Canceled for 2020
ARC/KARC Hamfest	Canceled for 2020
Field Day	June 27&28
Tech HamCrams	Mar (canceled), Nov
JOTA	October
Maker Faire	TBD
Stone Mt. Hamfest	Canceled for 2020
Holiday Party	December

GARS Recurring Calendar

- ◆ 2nd Tuesday of the month at 7 pm (except December): Monthly Club Meeting (**online until further notice**)
- ◆ 3rd Tuesday of the month at 7 pm (except December): Monthly Workshop (**online until further notice**)
- ◆ 2nd Sunday of the Month at 2 pm (**suspended until further notice**): [GARS Ham Exam Session](#)
Fire Station #24
2735 Mall of Georgia Blvd
Buford, GA 30519
- ◆ Every Monday at 7:30 pm: GARS Want, Swap, Sell, and Information Net on the GARS 147.075 MHz repeater
- ◆ Every Monday at 8:30 pm: ARES Training on the GARS 147.075 MHz repeater
- ◆ Most Saturdays at 7:30 am : GARS Weekly Breakfast
Cracker Barrel Restaurant
75 Celebration Dr., Suwanee, GA 30024

October GARS Meeting:

TBD

Check the [GARS Website](#) for updates

GARS CALENDAR OF EVENTS FOR SEPTEMBER 2020

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
August 30	August 31	1 7:30 - 8:00 pm GARS 2m Net	2	3	4	5 Breakfast at Cracker Barrel in Suwanee 7:30 AM
6	7 7:30 - 8:00 pm GARS 2m Net HAPPY LABOR DAY	8 7:00 - 9:00 pm GARS Meeting (Online)	9	10	11	12 Breakfast at Cracker Barrel in Suwanee 7:30 AM
13 GARS VE Team Testing Session (Canceled)	14 7:30 - 8:00 pm GARS 2m Net	15 7:00 - 9:00 pm GARS Workshop (Online)	16	17	18	19 Breakfast at Cracker Barrel in Suwanee 7:30 AM
20	21 7:30 - 8:00 pm GARS 2m Net	22	23	24	25	26 Breakfast at Cracker Barrel in Suwanee 7:30 AM
27	28 7:30 - 8:00 pm GARS 2m Net	29	30	31	October 1	October 2 Breakfast at Cracker Barrel in Suwanee 7:30 AM

Metro Testing Sessions

[Please check with each session contact for current status.—Ed.]

GARS publishes Metro Atlanta VE exam schedules as a service and is not responsible for errors or changes. Call and confirm schedules before going. All sessions are walk-in, unless otherwise noted. Take copies of current license and certificate of completed elements with you to all sessions. Find additional sessions online at <http://www.arrl-ga.org>.

First Sunday, ODD Months

2 pm (Jan, Mar, May, Jul, Sep, & Nov)
VEC: WCARS
Braselton Public Utility Building
4986 Highway 53, Braselton, GA
Contact: Roger Gibson, WB4T
(770) 271-4210 or (770) 712-9560
w4rlg@bellsouth.net

First Sunday, EVEN Months

2 pm (Feb, Apr, Jun, Aug, Oct, Dec)
VEC: WCARS
Hall County EOC
470 Crescent Dr. Gainesville, Ga.
Contact: Perry Roper, KO4RD
(770) 536-3056

Second Saturday

10:00 AM
Alpharetta North Park, Adult Activities Center
13450 Cogburn Rd, Alpharetta, GA 30004
Contact: Ian Kahn, KM4IK
E-mail: km4ik.ian@gmail.com

Third Saturday, ODD Months

VEC: ARRL
9:30 am (Walk-ins welcome)
Stone Mountain Masonic Lodge
840 VFW Drive
Stone Mountain, GA 30083
Contact: Frank Haynes, KV4SP
Email: fhaynes@vatmom.net
(678) 467-3712

Second Sunday

VEC: W5YI
2 pm
Fire Station #24
Mall of Georgia Boulevard
Buford, GA 30519
Contact: Dave Bruse, W4DTR
E-mail: exams@gars.org

First Sunday, EVEN Months

VEC: WCARS and W5YI
2 pm @ Barrow Co. Emerg. Serv. Bldg
66 McElroy Street
Winder, GA 30680
Contact: Mike Wolcott, W4WYI
(404) 281-6581
E-mail: W4WYI@ARRL.net
(cont. next column)

Ham Exam Results

August Results

No August VE Session

[Other local clubs are starting to hold limited VE sessions. See the articles on Page 6 in this issue of the GARzette for more details. — Ed.]

GARS VE Team Leaders
E-mail: exams@gars.org

GARS VE Website:
<http://gars.org/exams>



Fourth Tuesday

ARRL VEC
7 pm @ United Way Service Center
6279 Fairburn Rd., Douglasville
Contact: Jessie Clower, KB4WFK
(770) 942-6466

Fourth Sunday

2:30 pm Georgia Tech
VanLeer Elec. Building
Rm. W218, 777 Atlantic Dr.
For more information go to
www.w4aql.com and click on "Test Sessions"

Metro Club Meetings

[Please check with each club for meeting schedule and method (online, etc.) - Ed.]

First Tuesday

Kennehoochee ARC
Fire Station #1, Training Room
112 Haynes Street, Marietta, GA
Meeting begins at 7:00pm
Talk In 146.880(-)

First Thursday

Atlanta Radio Club
Georgia Red Cross HQ
1955 Monroe Dr., Atlanta, GA
Meeting is at 7:30pm
Talk In -146.820(-)

N.E. Georgia ARC

Commerce Public Library
1344 South Broad Street, Commerce, GA
Meeting is at 6:30pm
Talk In - 147.225(+), PL 123.0

Second Monday

Georgia Tech ARC
Room W218
Van Leer Electrical Engineering Bldg.
Georgia Tech Campus
Meeting at 7:00pm

Sawnee Amateur Radio Association
Beaver Toyota
1875 Buford Highway, Cumming, GA
Meeting at 6:30

Second Thursday

Alford Memorial Radio Club
Annistown Road Baptist Church
Annistown Rd & Spain Rd
Stone Mountain, GA
Dinner at 6:00pm, Meeting at 7:30pm
Talk In - 146.760(-)

Second Saturday

North GA QRP Club
Board Room of The Shepherd Center
2020 Peachtree Rd, NW, Atlanta, GA
at 10:00 AM

Third Tuesday

North Fulton Amateur Radio League
Alpharetta Recreation & Parks Dept.
Alpharetta Adult Activity Center
13450 Cogburn Road, Alpharetta, GA
meeting at 7:30pm
Talk In - 145.47(-)

For more information, go to:
<http://www.gars.org/>

[Note: No store access; curbside delivery available until further notice. - Ed.]

Serving You From Coast to Coast and Around the World



Order Toll-Free From a Location Near You

Or Take Advantage of Secure 24-Hour Ordering:

<http://www.hamradio.com>



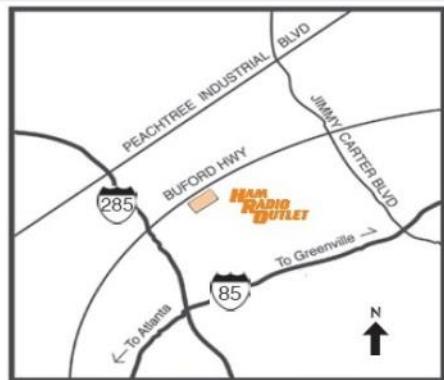
If your closest 800 number is busy, please call one of our other numbers.

Phone Hours: 9:30 am to 5:30 pm Monday – Saturday

All Stores Open 10am - 5:30pm Monday - Saturday

24-Hour FAX Order Lines at all Store Locations

Ham Radio Outlet App available at:



ATLANTA, GA 30340

6071 Buford Hwy, Doraville
1 mile north of I-285

(770) 263-0700

(800) 444-7927

24 Hour FAX (770) 263-9548

Email: atlanta@hamradio.com

Manager:
Mark KJ4VO
Assistant Mgr:
James KK4WNX

David AI4XL
Denise
Ken KI4BQS
Ray WN5FB
Koz KD3GC

Toll Free Numbers:

Northeast (800) 644-4476
West (800) 854-6046
Southeast (800) 444-7927
Mountain (800) 444-9476
Mid-Atlantic (800) 444-4799
New England (800) 444-0047



INTERBOROREFRIGERATION
HVAC/R

All branch Ice Machine Walk-in Box Cooler

Licensed by E.P.A.

Central A/C - Heater and Water Heater

All Commercial Refrigeration Systems

Ice Cream Freezer

All Jobs Guaranteed

30 years of Experience

Tel.: 610-816-8744

Email: cel-piloto52@hotmail.com

Luis Castellanos
owner

Address: 470 Bay lake pass,
Lawrenceville, GA 30046

Finally
A clog-free gutter
with no fine print.

The Real GUTTER PROTECTOR
NO CLOGS, NO OVERFLOW, GUARANTEED

You'll never have to clean your gutters again. The Real Gutter Protector's Waterloov® System uses a patented design that slows water more effectively and draws water in more completely, with smaller openings that keep out more debris. <http://www.realgutterprotector.com>

Atlanta, Georgia - (770) 630-1582



SHARON ADCOCK

*CRS, GRI, e-Pro,
Relocation Expert,
Associate Broker*

www.SharonAdcock.com
2920 Ronald Reagan Blvd
Cumming, GA 30041



Real Estate Broker

Century 21
21 Results Realty

Buying* Selling* Investing
For Any Real Estate
Matters

There has never been a
better time to invest in Real
Estate

Inventory is LOW
It's a Seller's Market

Sharon@
SharonAdcock.com
Cell: 404-428-9127
eFax 678-679-1383